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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,405	04/12/2004	Syed R. Iqbal	1139-026	2888

25215 7590 08/22/2007  
DOBRUSIN & THENNISCH PC  
29 W LAWRENCE ST  
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PONTIAC, MI 48342

EXAMINER
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PHAN, THIEM D

ART UNIT	PAPER NUMBER
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3729

MAIL DATE	DELIVERY MODE
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08/22/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/822,405

Applicant(s)

IQBAL ET AL.

Examiner

Tim Phan

Art Unit

3729

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 24-48 and 51-57 is/are pending in the application.
- 4a) Of the above claim(s) 28-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-27, 47, 48 and 51 is/are rejected.
- 7) ☒ Claim(s) 52-57 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on 08/13/07 has been entered.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 24, 47, 48 and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue et al (US 5,450,894).

**With regard to claim 24,** Inoue et al teach a process of controlling air flow control

though a car seat (Figs. 1, 83 & 84), comprising:

- drawing ambient air to a location beneath a seating surface (Fig. 1, area 74) of a transportation vehicle seat (Fig. 1, 50) and further into a mixing region (Fig. 1, area of 78 & 82) of the seat;
- mixing the drawn ambient air with a cooled fluid by evaporator (Fig. 1, 78) provided to the mixing region; and
- removing the resulting mixture from the mixing region through intermediate duct (Fig. 1, 66).

**With regard to claim 47**, Inoue et al teach that at least a portion of the resulting mixture is exhausted (Fig. 1, f1) to ambient air.

**With regard to claim 48**, Inoue et al teach the step of re-circulating (Fig. 87(B), area 60) at least a portion of the removed resulting mixture back into the mixing region.

**With regard to claim 51**, Inoue et al teach the step of placing a seat insert or upholstery (Fig. 137, 49) over a seat cushion (Fig. 137, 50) and below the seat surface.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3729

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue.

**With regard to claim 26,** Inoue et al teach a process of controlling air flow control though a car seat (Figs. 1, 83 & 84), comprising:

- drawing ambient air to a location beneath a seating surface (Fig. 1, area 74) of a transportation vehicle seat (Fig. 1, 50) and further into a mixing region (Fig. 1, area of 78 & 82) of the seat with a fan (Fig. 1, 74);
- mixing the drawn ambient air with a cooled fluid by evaporator (Fig. 1, 78) provided to the mixing region;
- removing the resulting mixture from the mixing region through intermediate duct (Fig. 1, 66);
- providing the cooled fluid through the use of a thermoelectric device or evaporator (Fig. 1, 78); and
- maintaining the pressure in the mixing region (Fig. 1, area of 74, 78, 82 & 80) below or above the ambient pressure so that substantially all of the resulting mixture does not pass through the seating surface (Fig. 1, 50) immediately, which disclose the claimed invention; except for locating the fan downstream the mixing region.

It would have been an obvious matter of design choice to locate the fan downstream the mixing region, since applicants have not disclosed that locating the fan downstream the mixing region solves any stated problem or is for any particular purpose and it appears that the invention

would perform equally well with the fan(Fig. 1, 74) located up stream the mixing region.

**With regard to claim 27**, Inoue et al teach a process of controlling air flow control though a car seat (Figs. 1, 83 & 84), comprising:

- drawing ambient air to a location beneath a seating surface (Fig. 1, area 74) of a transportation vehicle seat (Fig. 1, 50) an further into a mixing region (Fig. 1, area of 78 & 82) of the seat with a fan (Fig. 1, 74);
- mixing the drawn ambient air with a cooled fluid by evaporator (Fig. 1, 78) provided to the mixing region;
- removing the resulting mixture from the mixing region through intermediate duct (Fig. 1, 66);
- providing the cooled fluid through the use of a thermoelectric device or evaporator (Fig. 1, 78);
- wherein the cooled fluid is provided by blowing cooled air (Fig. 1, 78) into the mixing region (Fig. 1, area of 74, 78, 82 & 80) while preventing substantially all of the resulting mixture from passing through the seating surface (Fig. 1, 50); except for locating the fan down stream the mixing region.

It would have been an obvious matter of design choice to locate the fan down stream the mixing region, since applicants have not disclosed that locating the fan down stream the mixing region solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the fan(Fig. 1, 74) located up stream the mixing region.

6. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al in view of Taniguchi et al (US 5,187,943).

Inoue et al teach a process of controlling air flow control through a car seat (Figs. 1, 83 & 84), comprising:

- drawing ambient air through a seating surface (Fig. 1, 60) of a transportation vehicle seat (Fig. 1, 50) including the surrounding area into a mixing region (Fig. 1, area of 64) of the seat;
- mixing the drawn ambient air with a cooled fluid by evaporator (Fig. 1, 78) provided to the mixing region;
- removing the resulting mixture from the mixing region through intermediate duct (Fig. 1, 66); and
- providing the cooled fluid through the use of a thermoelectric device or evaporator (Fig. 1, 78); except for having the thermoelectric device as an element with an active side and waste side and adapted to provide heating and cooling by passing electricity through the device, wherein the cooled fluid is provided by the active side of the thermoelectric device.

Taniguchi et al teach a process of controlling car air conditioning system through using thermoelectric element (Fig. 22, 40) as a solid state, thermocouple cooling device by electric current.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply such thermoelectric element, as taught by Taniguchi et al, since

Taniguchi et stae at column 2, lines 49-50 that such modification would better control and maintain air conditionning temperature to keep user at a confort level.

*Allowable Subject Matter*

7. Claims 52-57 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Response to Arguments*

8. Applicants' remarks filed on 08/13/07 with respect to claims 24, 26, 27, 47 and 48 have been considered but they do not present any argument whether claims 24, 26, 27, 47 and 48 are properly rejected under 102(b) or 103(a) as being unpatentable over Inoue et al. Therefore the rejections are maintained.



*Conclusion*

9. The prior art made of record and not relied upon is considered pertinent to applicants' disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M & Tu, 6AM - 2PM, and W & Th, 9AM – 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tim Phan  
Examiner  
Art Unit 3729

tp  
August 20, 2007